



Supporting Distribution of Reference Germplasm (*Musa*) (SP1)

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A mini core collection

52 Accessions of *Musa* were selected according the following criteria:

- To be representative of existing genetic diversity
- To be duplicated at Bioversity International Transit Centre (ITC)
- To be designated as 'in-trust' collections
- To be used in breeding programmes

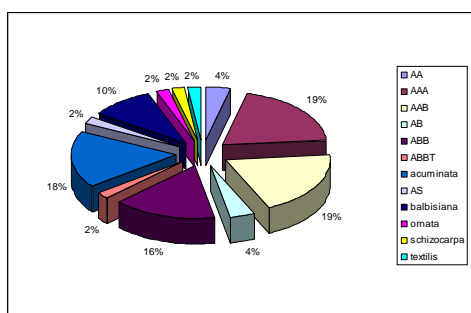


Fig. 1: Species representation among the 52 Accessions

The DNA was extracted from leaves of plant material in the CIRAD field collection based at Neufchâteau, Guadeloupe.

Distribution of DNA and Germplasm

DNA samples were deposited at the *Musa* Genome Resource Centre (MGRC) based at IEB in Olomouc, Czech Republic, where they were stored for further distribution to the *Musa* research community upon request. The MGRC operates on a cost-recovery basis and the recipients are expected to cover packing and shipment costs.

To receive DNA from the reference collection, a maximum of 1 µg of DNA per accession is provided; this ensures that researchers benefit from this service. DNA is distributed under a simplified MTA, recently developed in collaboration with Bioversity's Policy Research and Support Unit.

In vitro plantlets (proliferating or rooted) can be distributed for research purposes. Germplasm is available under the terms and conditions of the Standard Material Transfer Agreement (SMTA) to ensure that the germplasm and information related to it remain in the public domain.

Further information can be found online on the Musagenomics website : <http://www.musagenomics.org>

Diversity



Pisang Bakar (AAA)



Gros Michel (AAA)



Orishele (AAB)



Pisang Mas (AAcv)



Simili radjah (ABB)



Pisang Nangka (AAA)



Musa ornata



Pisang Klutuk Wulung (*M. balbisiana*)



Calcutta 4 (*M. acuminata*)

Quality Control

The reference material is being genotyped by an independent laboratory, at the Institute of Experimental Botany, Olomouc, Czech Republic, using 22 SSR markers (the same markers used for the genotyping study of 549 *Musa* accessions)

In addition, in order to assure that the material corresponds to the Bioversity ITC collection, DNA samples from that collection are being genotyped using the same markers.

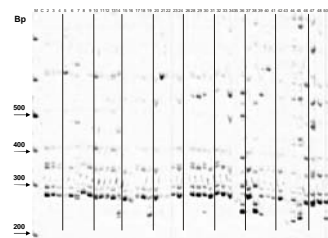


Fig. 2: PCR with microsatellite marker mMaCIR40